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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/639,690	08/16/2000	ANDREW K. BENSON	101997-5	3073

21125 7590 03/26/2003

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EXAMINER
KATCHEVES, KONSTANTINA T

ART UNIT	PAPER NUMBER
1636	18

DATE MAILED: 03/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/639,690	BENSON, ANDREW K.	
	Examiner	Art Unit	
	Konstantina Katcheves	1636	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 January 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6,8,9,14,17-21 and 23-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,8,9,14,17-21 and 23-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a)☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4)☐ Interview Summary (PTO-413) Paper No(s). _____ .
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: .

DETAILED ACTION

Claims 1-6, 8, 9, 14, 17-21 and 23-31 are pending in the present application. This Office Action is in reply to Applicant's Amendment filed 7 January 2003, Paper No. 17. Any rejections not repeated in the present Office Action are withdrawn.

Response to Amendment

Claims 1-9 and 14-21 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Heyneker et al., as applied to claims 1-4, 14, and 17-19 above, and further in view of Anderson et al. (U.S. Patent 5, 922, 591), Bruckner-Lea et al. (1996), Bergeron et al. (U.S. Patent 6,001,564), Nakayama et al. (U.S. Patent 5795717), and Tauxe (1997).

Claims 1-9 and 14-21 and 23-25 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Heyneker et al., Anderson, Bruckner-Lea et al., Bergeron et al., Nakayama et al., and Tauxe, as applied to claims 14-20 and 23-25 above, and further in view of Megerle (U.S. Patent 5,874,046).

Claims 14, 17-20 and 23-25 stand rejected under 35 U.S.C. 102(e) as being anticipated by Balch (U.S. Patent 6,083,763).

Claims 1-9, 14-16, 17-20 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Balch, as applied to claims 14, 17-20 and 23-25 above, in view of Megerle (U.S. Patent 5,874,046), and further in view of Anderson, Bruckner-Lea et al. (1999), Bergeron et al., Nakayama et al., and Tauxe (1997) (of record).

Claims 1-6, 8, 9, 14, 17-21 and 23-31 stand rejected under 35 U.S.C. 112, second paragraph for the reasons of record and those set forth below.

Response to Arguments

Claims 1-6, 8-9, 14 and 17-21 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Heyneker et al. in view of Anderson et al. (U.S. Patent 5, 922, 591), Bruckner-Lea et al. (1996), Bergeron et al. (U.S. Patent 6,001,564), Nakayama et al. (U.S. Patent 5795717), and Tauxe (1997). Claims 1-6, 8-9, 14, 17-21 and 23-25 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Heyneker et al., Anderson, Bruckner-Lea et al., Bergeron et al., Nakayama et al., and Tauxe, as applied to claims 1-6, 8-9, 14 and 17-21 above, and further in view of Megerle (U.S. Patent 5,874,046).

Applicant's arguments in response to both the above rejections are based on the inadequacy of Heyneker et al. as a primary reference and the failure of the other references to satisfy the failures of Heyneker et al. Because Applicant's primary argument for both references is similar, both rejections have been discussed concurrently.

Applicant argues that Heynecker et al. do not teach "correlating the distribution to known qualitative properties." Heynecker et al. do indeed teach the correlation of the distribution to known qualitative properties. Applicant has argued that these known food qualities include food safety. Heynecker specifically teaches that their method can be used for the screening of food samples for toxic bacteria. See column 9, lines 6-7. The identification of such toxic bacteria is crucial to food safety issues. Since Heynecker et al. do teach such a qualtitative property, none of the other reference need teach such a quality. Thus, the above rejections under 35 U.S.C. 103(a) are maintained.

Claims 14, 17-20 and 23-25 stand rejected under 35 U.S.C. 102(e) as being anticipated by Balch (U.S. Patent 6,083,763). Claims 1-9, 14-16 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Balch, as applied to claims 14, 17-20 and 23-25 above, in view of Megerle (U.S. Patent 5,874,046), and further in view of Anderson, Bruckner-Lea et al. (1999), Bergeron et al., Nakayama et al., and Tauxe (1997) (of record).

Applicant's arguments in response to both the above rejections are based on the inadequacy of Balch as a primary reference and the failure of the other references to satisfy the failures of Balch. Because Applicant's primary argument for both references is similar, both rejections have been discussed concurrently. Applicant again argues that, like Heynecker et al., Balch does not teach "correlating the distribution to known qualitative properties." Although Balch may not explicitly refer to food safety or other such "qualitative properties," it is implied that one would be motivated to identify bacterial or other contaminant microorganisms in a food sample for safety reasons. Applicant additionally argues that Balch specifically discloses using ribosomal RNA based probes not nucleic acid based probes. First, Applicant should note that RNA based probes are nucleic acid based probes. Ribonucleic acids (RNA) and deoxyribonucleic acids (DNA) are types of nucleic acids. Thus, the premise of this argument is fundamentally flawed. Second, Applicant should note that the claims generically recite probes, which hybridize to nucleic acids. Whether these nucleic acids are RNA or DNA is not specified in the claims.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-6, 8, 9, 14, 17-21 and 23-31 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant has amended the claims to eliminate language that was deemed vague and indefinite in the prior Office Action. Some of these changes, however, fail to overcome the present rejection. Applicant has amended the present claims to recite the limitation "known qualitative properties." Without a definitions or guidance from the specification, one of skill in the art would not be apprised of the metes and bounds of the present claims. Moreover, what are these properties, how are they measured, what are they predictive of and how are they predictive? Although, Applicant in claim 26 recites various qualitative properties, it is unclear how these properties relate to the output distribution or any prediction of food quality or processing conditions. Applicant also recites limitations drawn to "food quality" and "processing conditions." Applicant has not defined what food quality or processing conditions are or how they are measured. There are no parameters or standards present by which to measure either food quality or processing conditions. Applicant also states that the target species could be correlated to "extrinsic parameters" that would be predictive of "food quality" and "processing conditions." However, there is no indication what these parameters are nor how are they measured. Moreover, in claim 17 Applicant recites "food safety" as wells as quality the same issues discussed above are raised by this term. Also, does Applicant intend that this limitation is similar to food quality or processing because safety is a limitation, which is not evident in the prior independent claims?

This language is inherently qualitative thus rendering the claims unclear. Also, smell, texture and taste are all qualities that require a very subjective analysis and applicant has provided no quantitative or objective means to determine these qualities.

Applicant also recites limitations drawn to "food quality" and "processing conditions." Applicant has not defined what food quality or processing conditions are or how they are measured. There are no parameters or standards present by which to measure either food quality or processing conditions. Applicant also states that the target species could be correlated to "extrinsic parameters" that would be predictive of "food quality" and "processing conditions." However, there is no indication what these parameters are nor how are they measured. Moreover, in claim 17 Applicant recites "food safety" as wells as quality the same issues discussed above are raised by this term. Also, does Applicant intend that this limitation is similar to food quality or processing because safety is a limitation, which is not evident in the prior independent claims?

With regard to these rejections Applicant has argued that "measuring or analyzing these known qualitative properties is not necessary to the interpretation of the claimed invention." Applicant's assertion conflicts with their prior arguments, which rely on these known qualitative properties in asserting the patentability of the present claims. Moreover, Applicant has not addressed the issues that the subjective nature of these limitations renders the metes and bounds of the claims unclear. A qualitative property by its very subjective nature is open to a different interpretation based on who reads and interprets the claims. These qualitative properties are subject to the tastes, ideas, preconceptions and assumptions of the person or persons reading the claims.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Konstantina Katcheves whose telephone number is (703) 305-1999. The examiner can normally be reached on Monday through Friday 7:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Remy Yucel, Ph.D. can be reached on (703) 305-1998. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3014 for regular communications and (703) 305-7939 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3388.

Konstantina Katcheves
March 18, 2003

Remy Yucel

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